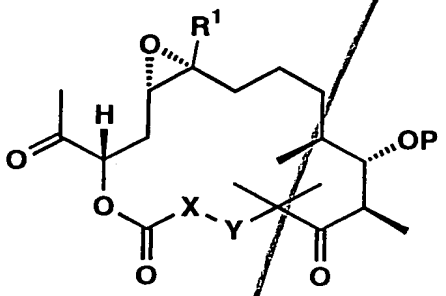
Patent claims

1. Epothilon derivative of the formula (2)



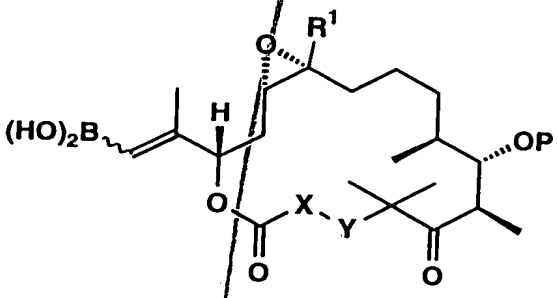
wherein

R^1 is a H atom or a C_1- to C_8-alkyl group,

X-Y is a group of the formula $-CH_2CH-OP$ or $-CH=CH-$, and

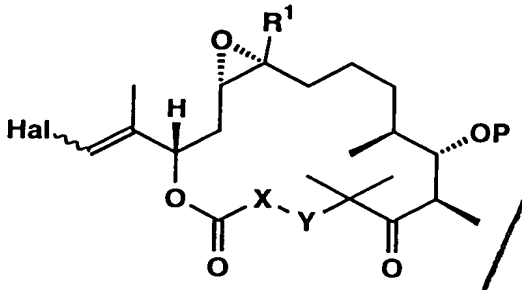
P is a protecting group.

2. Epothilon derivative of the formula (3)



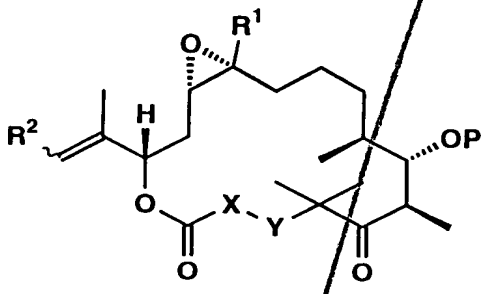
wherein the radicals are as defined in claim 1.

3. Epothilon derivative of the formula (4)



wherein the radicals R^1, X-Y and P are as defined in claim 1, and Hal is a halogen atom, such as Br or I.

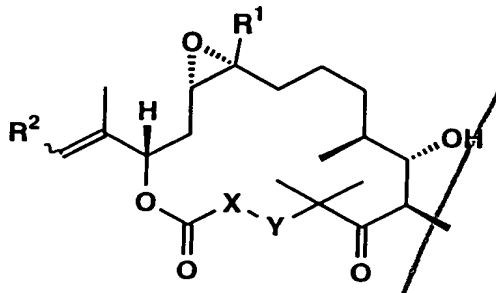
4. Epothilon derivative of the formula (5)



wherein the radicals R^1, X-Y and P are as defined in claim 1, and

R^2 is a monocyclic aromatic group or a vinyl group, each of which may be substituted in the ortho- and/or meta- and/or para-position(s) by halogen atoms and/or OR^4 and/or NR^5R^6 and/or alkyl, alkenyl and/or alkynyl groups, or is a monocyclic 5- or 6-membered heteroaromatic group which may have one or more O and/or N and/or S atoms in the ring and/or may have OR^4 and/or NR^5R^6 and/or alkyl, alkenyl and/or alkynyl groups as substituents, wherein the radicals R^4, R^5 and R^6 are each independently of the others as defined for R^1 in claim 1, but are independent of R^1.

5. Epothilon derivative of the formula (6)



wherein the radicals are as defined in claim 4.

6. Epothilon derivative according to any one of the preceding claims, characterised in that R^1, R^4, R^5 and R^6 is a H atom or a C_1- to C_6-alkyl group, preferably a C_1- to C_6-alkyl group.

7. Epothilon derivative according to any one of claims 4 to 6, characterised in that the substituents of the monocyclic aromatic group and/or heteroaromatic group are C_{1-6}-alkyl or C_{2-6}-alkenyl or C_{2-6}-alkynyl groups, preferably C_{1-4}-alkyl or C_{2-4}-alkenyl or C_{2-4}-alkynyl groups, and the halogen atoms are fluorine, chlorine, bromine or iodine atoms.

8. Epothilon derivative according to any one of claims 4 to 7, characterised in that the aromatic group or heteroaromatic group has 1, 2 or 3 substituents and the heteroaromatic group has 1, 2 or more and especially 1, 2, 3 or 4 hetero atoms.

9. Process for the production of a compound of the formula (3), **characterised** in that a compound of the formula (2) is reacted with a compound of the formula $HC[B(OR)_2]_3$, the radicals being as defined in one of the

preceding claims and R being as defined for R^1 but being independent of R^1.

10. Process for the production of a compound of the formula (4), **characterised** in that a compound of the formula (3) is reacted with N-iodo- or N-bromo-succinimide and the radicals are as defined in one of the preceding claims.

11. Process for the production of a compound of the formula (5), **characterised** in that a compound of the formula (3) is reacted by means of a Suzuki coupling with a compound of the formula R^2-Z, wherein R^2 is as defined in one of the preceding claims and Z may be a halogen atom or a group of the formula $-OSO_2CF_3$, -CH=CHI, $-CH=CHOSO_2CF_3$.

12. Process for the production of a compound of the formula (5), **characterised** in that a compound of the formula (4) is reacted by means of a Stille coupling with R^2-SNR^3_3, wherein R^2 is as defined in one of the preceding claims and R^3 is a C_1- to C_6-alkyl group, preferably a C_{1-4}-alkyl group, especially preferably a methyl, ethyl, propyl or butyl group.

13. Process for the production of a compound of the formula (6), **characterised** in that the protecting group is removed from a compound of the formula (5).

14. Process for the production of a compound of the formula (6), **characterised** in that it comprises the process steps disclosed in claims 9, 10, 11 or 12 and 13, the radicals being as defined in the preceding claims.

15. Medicament that contains at least one of the compounds described in claims 1 to 8 and optionally customary carriers, diluents and/or adjuvants.

16. Medicament according to claim 15, characterised in that it is a cytostatic agent.

17. Plant protection agent in agriculture and/or forestry and/or in horticulture that contains at least one of the compounds described in claims 1 to 8 and optionally customary carriers, diluents and/or adjuvants.